ABSTRACT

A tunable impedance matching circuit is provided for tuning an active device, such as, e.g., a field effect transistor, in a RF power amplifier circuit. The matching circuit includes an adjustable length transmission line for electrically coupling a RF signal between an active device and its source and a load. The transmission line, which has a length approximately equal to a quarter of a wavelength of the fundamental frequency of a RF signal being amplified, is adjusted to achieve selected performance characteristic(s) of the amplifier, such as, e.g., input return loss.